

Shaughnessy No.: 059101

Date out of EAB: DEC 17 1987

To: Dennis Edwards  
Product Manager 12  
Registration Division (TS 767C)

From: Therese Dougherty, Chief  
Environmental Chemistry Review Section #1  
Exposure Assessment Branch  
Hazard Evaluation Division (TS 769C)



Thru: Paul F. Schuda, Chief  
Exposure Assessment Branch/HED (TS-769C)



Attached, please find the EAB review of...

Reg./File # 464-404

Chemical Name: Chlorpyrifos

Type Product: Insecticide

Company Name: Dow Chemical Company

Purpose: Reevaluation of rotational crop restriction.

Date Received: 3/20/87

Action Code: 660

Date Completed: 12/16/87

EAB # (s): 70387,

Monitoring Study Requested:           

Total Reviewing Time: 1.0 days

Monitoring Study Volunteered:           

Deferrals to:            Ecological Effects Branch

           Residue Chemistry Branch

           Toxicology Branch

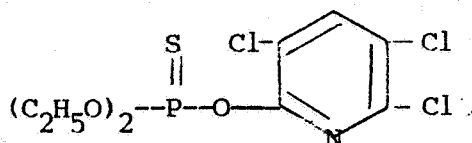
1. CHEMICAL: Common Name: Chlorpyrifos

Chemical Name: O,O-DiethylO-(3,5,6-trichloro-2-pyridyl)-phosphorothioate

Trade Name: Dursban, Lorsban

Submitter: Dow Chemical Company

Structure:



2. TEST MATERIAL: N/A

3. STUDY /ACTION TYPE: Request for reevaluation of rotational crop interval based on a previously reviewed confined rotational crop study.

4. STUDY IDENTIFICATION:

No studies submitted. Correspondence regards:

Bauriedel, W.P. and J.H. Miller. 1985. Rotational crop studies using <sup>14</sup>C-labeled Chlorpyrifos. Reviewed in April 1985.

5. REVIEWED BY:

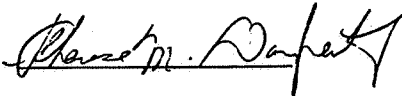
Paul Mastradone, Ph.D  
Chemist  
EAB/HED/OPP

Signature: 

Date: DEC 11 1987

6. APPROVED BY:

Therese Dougherty, Chief  
ECRS#1  
EAB/HED/OPP

Signature: 

Date: DEC 17 1987

7. CONCLUSIONS:

- A. If the registrant wishes that the rotational crop interval imposed in the registration standard be reviewed; EAB requests that a copy of the original study be sent for review. This will allow for complete reevaluation of the study under the updated rotational crop guidelines.

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8. RECOMMENDATIONS:

- A. EAB recommends that the request for reevaluation of the rotational crop interval be resubmitted with a copy of the original study.
- B. EAB recommends no change in the rotational crop interval for chlorpyrifos at this time.

9. BACKGROUND:

- A. This study was reviewed prior to the imposition of the updated rotational crop policy. Review of the EAB files indicates that the study was a confined rotational crop study. Based on the review found in the EAB file, <sup>14</sup>C residues were found in the crops indicating possible uptake of chlorpyrifos residues in crops harvested 1 year after application of chlorpyrifos.

10. DISCUSSION OF INDIVIDUAL STUDIES:

N/A

11. COMPLETION OF ONE LINER:

N/A

12. CBI APPENDIX:

N/A



DOW CHEMICAL U.S.A.

07/145649

February 12, 1985

MIDLAND, MICHIGAN 48640

Mr. Jay S. Ellenberger  
Registration Division  
U.S. EPA  
Room 202, Crystal Mall #2  
1921 Jefferson Davis Highway  
Arlington, Virginia 22202

Dear Mr. Ellenberger:

**Subject: Chlorpyrifos Reregistration - Rotational Crop Study**

Attached are two copies of a second rotational crop study by W. R. Bauriedel and J. H. Miller entitled "Rotational Crop Studies Using Soil Treated With  $^{14}\text{C}$ -Labeled Chlorpyrifos". This study was conducted in accordance with EPA guideline reference number 165-1 for confined accumulation studies on rotational crops and thus satisfies this data requirement under 158.130 for environmental fate studies.

The results of the subject study showed essentially no residue for chlorpyrifos and its 3,5,6-trichloro-2-pyridinol (TCP) metabolite in various plant substrates from rotational crops planted at 30, 126, and 365 days after treatment of the top one inch of soil with  $^{14}\text{C}$ -labeled chlorpyrifos at the rate of 5 lb per acre. In addition, no direct metabolites of chlorpyrifos other than traces of the TCP metabolite were found in this study.

Based on the results of the subject study, we believe that a rotational crop restriction is not warranted on end use product labeling and thus respectfully request that the Agency reconsider the rotational crop label restriction imposed on all agricultural and home garden end use products as shown in the Reregistration Notice for chlorpyrifos issued on September 28, 1984.

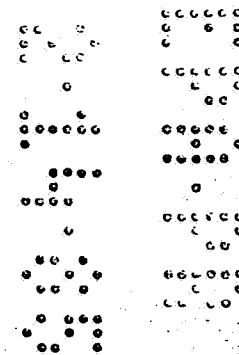
If there are any questions concerning the attached study, please feel free to telephone me at 517-636-4504.

Sincerely,

*Robert F. Bischoff*

Robert F. Bischoff  
Product Registration Manager  
Agricultural Products Department

Enclosure



**Quality  
Performance**  
Means More At Dow.

AN OPERATING UNIT OF THE DOW CHEMICAL COMPANY

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